

**WHAT IS CLAIMED IS:**

- 1        1.    A non-aqueous electrolytic solution comprising glycerine and at least one  
2        soluble salt formed by the neutralization of at least one non-halogen-containing  
3        organic or inorganic acid anion with at least one alkali metal, ammonium, or  
4        protonated amine cation; wherein the acid anion is derived from an acid having a pKa  
5        lower than phosphoric acid.
  
- 1        2.    The non-aqueous electrolytic solution according to claim 1 wherein the soluble  
2        salt is ammonium nitrate, dimethyl ethanolamine nitrate, dimethyl ethanolamine  
3        sulfate, dimethylethoxy ethanolamine nitrate, or dimethylethoxy ethanolamine sulfate.
  
- 1        3.    The non-aqueous electrolytic solution according to claim 2 wherein the soluble  
2        salt is ammonium nitrate.
  
- 1        4.    The non-aqueous electrolytic solution according to claim 1 wherein water  
2        content is less than 2 wt%, based on total weight of the solution.
  
- 1        5.    The non-aqueous electrolytic solution according to claim 4 wherein water  
2        content is less than 1 wt%, based on total weight of the solution.
  
- 1        6.    The non-aqueous electrolytic solution according to claim 1 comprising about  
2        0.5 wt% to about 15 wt% of the soluble salt, based on total weight of the solution.
  
- 1        7.    The non-aqueous electrolytic solution according to claim 6 comprising about  
2        5 wt% to about 10 wt% of the soluble salt , based on total weight of the solution.
  
- 1        8.    A non-aqueous electrolytic solution comprising glycerine and ammonium  
2        nitrate.
  
- 1        9.    A method of anodizing an anode comprising anodizing at a temperature of about  
2        60°C to about 125°C until a uniform anodic oxide film is formed over the entire anode

1 surface with the non-aqueous electrolytic solution according to claim 1; wherein the  
2 anode comprises a valve metal-derived nitride, sub-nitride, oxide, or sub-oxide, or an  
3 alloy thereof, a mixture thereof, or a metallic glass composition thereof.

1 10. The method according to claim 9 wherein the temperature is about 80°C to  
2 about 95°C.

1 11. The method according to claim 10 wherein the temperature is about 84°C to  
2 about 92°C.

1 12. The method according to claim 9 wherein the anode comprises tantalum nitride,  
2 niobium nitride, or titanium nitride.

1 13. A capacitor comprising an anode prepared from a valve-metal derivative  
2 powder and a non-aqueous electrolytic solution comprising glycerine and at least one  
3 soluble salt formed by the neutralization of at least one non-halogen-containing  
4 organic or inorganic acid anion with at least one alkali metal, ammonium, or  
5 protonated amine cation; wherein the acid anion is derived from an acid having a pKa  
6 lower than phosphoric acid, and wherein the valve-metal derivative powder is a valve  
7 metal-derived nitride, sub-nitride, oxide, or sub-oxide, or an alloy thereof, a mixture  
8 thereof, or a metallic glass composition thereof.

1 14. The capacitor according to claim 13 wherein the soluble salt is ammonium  
2 nitrate, dimethyl ethanolamine nitrate, dimethyl ethanolamine sulfate, dimethylethoxy  
3 ethanolamine nitrate, or dimethylethoxy ethanolamine sulfate.

1 15. The capacitor according to claim 14 wherein the soluble salt is ammonium  
2 nitrate.

1 16. The capacitor according to claim 13 wherein water content of the solution is less  
2 than 2 wt%, based on total weight of the solution.

1 17. The capacitor according to claim 16 wherein water content of the solution is less  
2 than 1 wt%, based on total weight of the solution.

1 18. The capacitor according to claim 13 wherein the solution comprises about 0.5  
2 wt% to about 15 wt% of the soluble salt, based on total weight of the solution.

1 19. The capacitor according to claim 18 wherein the solution comprises about 5  
2 wt% to about 10 wt% of the soluble salt, based on total weight of the solution.

1 20. The capacitor according to claim 13 wherein the valve-metal derivative is  
2 tantalum nitride, niobium nitride, or titanium nitride.